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SERIGRAPHED ANTENNA FOR A MOTOR VEHICLE

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The present invention relates to the antennas fitted to motor vehicles, more particularly the antennas serigraphed on the rear window of such vehicles, and especially motor vehicles of the station wagon type.

The antennas intended to be mounted on board private or utility vehicles are more and more commonly being incorporated in such a way that they are no longer visible from outside the vehicle, thus permitting this vehicle to have a more unified appearance which appeals to current taste among the public. The drawbacks linked to the use of protruding equipment, which include considerations of aerodynamics, noise, vibrations, sealing-tightness and vandalism are thus greatly reduced.

This being the case, it is important that the antenna be placed in an environment such that it is able to continue to carry out its essential function which consists of a transduction of an electromagnetic field (external to the vehicle) into an electrical signal which can be used by radio equipment.

A compromise therefore always has to be sought between the position of the antenna which it is desired to conceal as much as possible and its radiating performance which is affected to a greater extent the more the radiating structure of the antenna is incorporated into the vehicle and in particular the closer it is to its metal parts.

On the other hand, automobile manufacturers attach great importance to a single so-called "multi-function" housing including a number of functions, which makes it possible to simplify incorporation into the vehicle and the passage of the cables connecting this housing to the car radio reception device or to the device which requires the signals received by the antenna.

FM and remote keyless entry antennas have linear terrestrial polarisation and the reference is an antenna of a length equal to one quarter the wavelength (or a length of about 750 mm for FM and 170 mm for remote keyless entry).